SEQUENCE LISTING

<110> Merck & Co., Inc.
      Monaci, Paolo
      Nuzzo, Maurizio
      La Monica, Nicola
      Ciliberto, Gennaro
      Lahm, Armin

<120> RHESUS HER2/NEU, NUCLEOTIDES ENCODING
   SAME AND USES THEREOF

<130> ITR0043-PCT

<150> 60/437,846
<151> 2003-01-03

<160> 43

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 3768
<212> DNA
<213> Rhesus Monkey

<220>
<221> misc_feature
<222> (1)...(3768)
<223> R = A or G

<400> 1
atggagctgg cggcctggta ccgctggggg ctcctcctcg ccctcttgcc ccccggagct 60
gcgggcaccc aagtgtgcac cggcacagac atgaagctgc ggctccctgc cagtcccgag 120
acccacctgg acatgctccg ccacctctac cagggctgcc aggtggtgca gggtaacctg 180
gaactcacct acctgcccac caatgccagc ctctccttcc tgcaggatat ccaggaggtg 240
cagggctacg tgctcatcgc tcacaaccaa gtgaggcagg tcccactgca gaggctgcgg 300
attgtgcgag gcacccagct ctttgaggac aactatgccc tggccgtgct agacaatgga 360
gacctgctga caataccac ccctgtcaca ggggcctccc caggaggcct gcgggagctg 420
cagcttcgaa gcctcacaga gatcttgaaa ggaggggtct tgatccagcg gaaccccag 480
ctctgctacc aggacacgat tttgtggaag gacatcttcc ataagaacaa ccagctggct 540
ctcacactga tcgacaccaa ccgctctcgg gcctgccacc cctgttctcc agtgtgtaag 600
ggctcccgct gctggggaga gagttctgag gattgtcaga gcctgacgcg cactgtctgt 660
gccggtggct gtgcccgctg caaggggcca ctgcccactg actgctgcca tgagcagtgt 720
gctgccggct gcacgggccc caagcactct gactgcctgg cctgcctcca cttcaaccac 780
agcggcatct gtgarctgca ctgcccagcc ctggtcacct acaacacaga cacctttgag 840
tccatgccca accccgaggg ccggtataca ttcggcgcca gctgtgtgac tgcctgtccc 900
tacaactacc tttctacgga cgtgggatcc tgcaccctcg tctgcccct gcacaaccaa 960
gaggtgacag cggaggacgg aacacagcga tgtgagaagt gcagcaagcc ctgtgcccga 1020
gtgtgctatg gtctgggcat ggagcacttg cgagaggtga gggcggtcac cagtgccaat 1080
atccaggagt ttgctggctg caagaagatc tttgggagct ggcatttct gccagagagc 1140
tttgatggcg acccagcctc caacaccgcc ccgcttcagc cggagcagct ccgagtgttt 1200
gagactctgg aagagatcac aggttaccta tacatctgac catggccaga cagcctgcct 1260
gaccttagcg tcctccagaa cctgcaagta atccggggac gaattctgca caatggcgcc 1320
tactcactga ccctgcaagg gctgggcatc agctggctgg ggctgcgctc gctgagggaa 1380
ctgggcagtg gactggcct catccaccat aacacccgcc tctgctttgt gcacacggtg 1440
ccctgggacc agctcttccg gaaccgcac caagccctgc tccacactgc caaccggcca 1500
gaggacgagt gtgtgggcga gggcctggcc tgccaccagc tgtgcgcccg agggcactgc 1560
tggggtccag ggcccaccca gtgtgtcaac tgcagccagt ccttcgggg ccaggagtgc 1620
gtggaggaat gccgagtact gcaggggctc cccaggagt atgtgaatgc cagacactgt 1680
ttgccgtgcc accctgagtg tcagccccag aatggctcag tgacatgttt ggaccggag 1740
gctgaccagt gtgtggcctg tgcccactat aaggaccctc ccttctgcgt ggcccgctgc 1800
cccagcggtg tgaaacctga cctctcctac atgcccatct ggaagtttcc agatgaggag 1860

```
ggcacgtgcc agtcttgccc catcaactgc acccactcct gtgtggacct ggatgacaag 1920
ggctgccccg ccgagcagag agccagccct ctgacgtcca tcatctctgc tgtggtgggc 1980
attctgctgg tcgtggtctt ggggggtggtc tttggaatcc tcatcaagcg acggcagcag 2040
aagatccgga agtacacgat gcggaggctg ctgcaggaaa cggagctggt ggagccactg 2100
acaccgagtg gagcgatgcc caaccaggcg cagatgcgga tcctgaaaga gacggagtcg 2160
aggaaggtga aggtgcttgg atctggagct tttggcacag tctacaaggg catctggatc 2220
cctgatgggg agaatgtgaa aattccagtg gccatcaaag tgttgaggga aaacacatcc 2280
cccaaagcca acaaagaaat cttagacgaa gcatatgtga tggctggtgt gggctcccca 2340
tatgtctccc gcctcctggg catctgcctg acatccacgg tgcagctggt gacacagctt 2400
atgcccctatg gctgcctctt agaccatgtc cgagaaaacc gcggacgcct gggctcccag 2460
gacctgctga actggtgtat gcagattgcc aaggggatga gctacctgga ggatgtgcgg 2520
ctcgtacaca gggacttggc tgctcggaac gtgctggtca agagtcccaa ccatgtcaaa 2580
attacagact ttgggctggc tcggctgctg acattgacg agacagagta ccatgcagat 2640
gggggcaagg tgcccatcaa gtggatggcg ctggagtcca ttctccgacg gcggttcacc 2700
caccagagtg atgtgtggag ttatggtgtg actgtgtggg agctgatgac ttttgggggcc 2760
aaaccttacg atgggatccc agcccgggag atccctgacc tgctgaaaa ggggggagcgg 2820
ctgccccagc cccccatctg caccattgat gtctacatga tcatggtcaa atgttggatg 2880
attgactctg aatgtcggcc gagattccgg gagttggtgt cggaattctc ccgcatggcc 2940
agggaccccc agcgctttgt ggtcatccag aatgaggact gggcccagc cagtcccttg 3000
gacagcacct tctaccgctc actgctggag gacgatgaca tggggacct ggtggatgct 3060
gaggagtatc tggtacccca gcagggcttc ttctgtccag accctgcccc gggcactggg 3120
ggcatggtcc accacaggca ccgcagctca tctaccagga gtggcggtgg ggacctgacg 3180
ctagggctgg agccctctga agaggaggcc cccaggtctc cacgggcacc ctccgaaggg 3240
actggctctg atgtatttga tggtgaccta ggaatggggg cagccaaggg gctgcaaagc 3300
ctccccgcac atgacccag ccctctacag cggtacagtg aggacccac ggtacccctg 3360
ccttctgaga ctgacggcta cgttgccccc ctgacctgca gtccccagcc cgaatatgtg 3420
aaccagccag atgttcggcc acagcccccct tcgccccaag agggccctct gtctcctgcc 3480
cgacctactg gtgccactct ggaaaggccc aagactctct ccccagggaa gaatggggtt 3540
gtcaaagacg tttttgcctt tgggggtgct gtggagaacc ccgagtactt ggcaccccgg 3600
ggaggagctg cccctcagcc ccaccttcct cctgccttca gcccagcctt cgacaacctc 3660
tattactggg accaggaccc atcagagcgg ggggctccac ctagcacctt caaagggaca 3720
cctacggcag agaacccaga gtacctgggt ctggacgtgc cagtgtga             3768
```

<210> 2
<211> 1255
<212> PRT
<213> Rhesus Monkey

<400> 2

```
Met Glu Leu Ala Ala Trp Tyr Arg Trp Gly Leu Leu Leu Ala Leu Leu
1               5                   10                  15
Pro Pro Gly Ala Ala Gly Thr Gln Val Cys Thr Gly Thr Asp Met Lys
            20                  25                  30
Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
        35                  40                  45      -
Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
    50                  55                  60
Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
65                  70                  75                  80
Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
                85                  90                  95
Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
            100                 105                 110
Ala Leu Ala Val Leu Asp Asn Gly Asp Leu Leu Asn Asn Thr Thr Pro
        115                 120                 125
Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
    130                 135                 140
Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
145                 150                 155                 160
Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
                165                 170                 175
Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
            180                 185                 190
His Pro Cys Ser Pro Val Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
```

-2-

```
                195                 200                 205
Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
    210                 215                 220
Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
225                 230                 235                 240
Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
                245                 250                 255
His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
                260                 265                 270
Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
                275                 280                 285
Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
    290                 295                 300
Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
305                 310                 315                 320
Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
                325                 330                 335
Pro Cys Ala Arg Val Cys Tyr Gly Leu Gly Met Glu His Leu Arg Glu
                340                 345                 350
Val Arg Ala Val Thr Ser Ala Asn Ile Gln Glu Phe Ala Gly Cys Lys
    355                 360                 365
Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu Ser Phe Asp Gly Asp
    370                 375                 380
Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Arg Val Phe
385                 390                 395                 400
Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro
                405                 410                 415
Asp Ser Leu Pro Asp Leu Ser Val Leu Gln Asn Leu Gln Val Ile Arg
                420                 425                 430
Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu
    435                 440                 445
Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly
    450                 455                 460
Leu Ala Leu Ile His His Asn Thr Arg Leu Cys Phe Val His Thr Val
465                 470                 475                 480
Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr
                485                 490                 495
Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His
                500                 505                 510
Gln Leu Cys Ala Arg Gly His Cys Trp Gly Pro Gly Pro Thr Gln Cys
    515                 520                 525
Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys Val Glu Glu Cys
    530                 535                 540
Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr Val Asn Ala Arg His Cys
545                 550                 555                 560
Leu Pro Cys His Pro Glu Cys Gln Pro Gln Asn Gly Ser Val Thr Cys
                565                 570                 575
Phe Gly Pro Glu Ala Asp Gln Cys Val Ala Cys Ala His Tyr Lys Asp
                580                 585                 590
Pro Pro Phe Cys Val Ala Arg Cys Pro Ser Gly Val Lys Pro Asp Leu
    595                 600                 605
Ser Tyr Met Pro Ile Trp Lys Phe Pro Asp Glu Glu Gly Thr Cys Gln
    610                 615                 620
Ser Cys Pro Ile Asn Cys Thr His Ser Cys Val Asp Leu Asp Asp Lys
625                 630                 635                 640
Gly Cys Pro Ala Glu Gln Arg Ala Ser Pro Leu Thr Ser Ile Ile Ser
                645                 650                 655
Ala Val Val Gly Ile Leu Leu Val Val Val Leu Gly Val Val Phe Gly
                660                 665                 670
Ile Leu Ile Lys Arg Arg Gln Gln Lys Ile Arg Lys Tyr Thr Met Arg
    675                 680                 685
Arg Leu Leu Gln Glu Thr Glu Leu Val Glu Pro Leu Thr Pro Ser Gly
    690                 695                 700
Ala Met Pro Asn Gln Ala Gln Met Arg Ile Leu Lys Glu Thr Glu Leu
```

```
705                     710                     715                     720
Arg Lys Val Lys Val Leu Gly Ser Gly Ala Phe Gly Thr Val Tyr Lys
                  725                     730                     735
Gly Ile Trp Ile Pro Asp Gly Glu Asn Val Lys Ile Pro Val Ala Ile
              740                     745                     750
Lys Val Leu Arg Glu Asn Thr Ser Pro Lys Ala Asn Lys Glu Ile Leu
          755                     760                     765
Asp Glu Ala Tyr Val Met Ala Gly Val Gly Ser Pro Tyr Val Ser Arg
      770                     775                     780
Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Val Thr Gln Leu
785                     790                     795                     800
Met Pro Tyr Gly Cys Leu Leu Asp His Val Arg Glu Asn Arg Gly Arg
              805                     810                     815
Leu Gly Ser Gln Asp Leu Leu Asn Trp Cys Met Gln Ile Ala Lys Gly
          820                     825                     830
Met Ser Tyr Leu Glu Asp Val Arg Leu Val His Arg Asp Leu Ala Ala
      835                     840                     845
Arg Asn Val Leu Val Lys Ser Pro Asn His Val Lys Ile Thr Asp Phe
      850                     855                     860
Gly Leu Ala Arg Leu Leu Asp Ile Asp Glu Thr Glu Tyr His Ala Asp
865                     870                     875                     880
Gly Gly Lys Val Pro Ile Lys Trp Met Ala Leu Glu Ser Ile Leu Arg
              885                     890                     895
Arg Arg Phe Thr His Gln Ser Asp Val Trp Ser Tyr Gly Val Thr Val
          900                     905                     910
Trp Glu Leu Met Thr Phe Gly Ala Lys Pro Tyr Asp Gly Ile Pro Ala
          915                     920                     925
Arg Glu Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Pro Gln Pro
      930                     935                     940
Pro Ile Cys Thr Ile Asp Val Tyr Met Ile Met Val Lys Cys Trp Met
945                     950                     955                     960
Ile Asp Ser Glu Cys Arg Pro Arg Phe Arg Glu Leu Val Ser Glu Phe
              965                     970                     975
Ser Arg Met Ala Arg Asp Pro Gln Arg Phe Val Val Ile Gln Asn Glu
          980                     985                     990
Asp Leu Gly Pro Ala Ser Pro Leu Asp Ser Thr Phe Tyr Arg Ser Leu
      995                     1000                    1005
Leu Glu Asp Asp Asp Met Gly Asp Leu Val Asp Ala Glu Glu Tyr Leu
      1010                    1015                    1020
Val Pro Gln Gln Gly Phe Phe Cys Pro Asp Pro Ala Pro Gly Thr Gly
1025                    1030                    1035                    1040
Gly Met Val His His Arg His Arg Ser Ser Ser Thr Arg Ser Gly Gly
                  1045          ·         1050                    1055
Gly Asp Leu Thr Leu Gly Leu Glu Pro Ser Glu Glu Glu Ala Pro Arg
              1060                    1065                    1070
Ser Pro Arg Ala Pro Ser Glu Gly Thr Gly Ser Asp Val Phe Asp Gly
          1075                    1080                    1085
Asp Leu Gly Met Gly Ala Ala Lys Gly Leu Gln Ser Leu Pro Ala His
      1090                    1095                    1100
Asp Pro Ser Pro Leu Gln Arg Tyr Ser Glu Asp Pro Thr Val Pro Leu
1105                    1110                    1115                    1120
Pro Ser Glu Thr Asp Gly Tyr Val Ala Pro Leu Thr Cys Ser Pro Gln
              1125                    1130                    1135
Pro Glu Tyr Val Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro
          1140                    1145                    1150
Gln Glu Gly Pro Leu Ser Pro Ala Arg Pro Thr Gly Ala Thr Leu Glu
          1155                    1160                    1165
Arg Pro Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val
      1170                    1175                    1180
Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Ala Pro Arg
1185                    1190                    1195                    1200
Gly Gly Ala Ala Pro Gln Pro His Leu Pro Pro Ala Phe Ser Pro Ala
              1205                    1210                    1215
Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Ser Glu Arg Gly Ala
```

```
                1220              1225              1230
Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr
        1235              1240              1245
Leu Gly Leu Asp Val Pro Val
   1250              1255
```

```
<210> 3
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 3
agccatgggg ccggagccgc a                                    21

<210> 4
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 4
agggctgggc agtgcagctc acagat                               26

<210> 5
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 5
ctgcgggagc tgcagcttcg aag                                  23

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 6
ccaaagatct tcttgcagcc                                      20

<210> 7
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 7
atctgtgagc tgcactgccc agccct                               26

<210> 8
<211> 19
```

```
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 8
gagcgcagcc ccagccagc                                               19

<210> 9
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 9
ggctgcaaga agatctttgg                                              20

<210> 10
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 10
tgggtgcagt tgatggggca                                              20

<210> 11
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 11
ccagtttaaa catttaaatg ccgccaccat ggagctggcg gcct                   44

<210> 12
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 12
tgctggggtc cagggcccac ccagtg                                       26

<210> 13
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 13
tcagggatct cccgggctgg gat                                          23
```

```
<210> 14
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 14
gtggaggaat gccgagtact gcag                                    24

<210> 15
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 15
tgtgttttcc ctcaacacgg cgatggccac tggaatttt                    39

<210> 16
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 16
aaaattccag tggccatcgc cgtgttgagg gaaaacaca                    39

<210> 17
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 17
ctgggcatct gcctgacatc cac                                     23

<210> 18
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 18
ggtttcaggg acagtctctg aa                                      22

<210> 19
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 19
```

```
gccgtcgact ttacatggca cgtccagacc ca                              32
```

<210> 20
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 20
```
cttcatgtct gtgccggt                                              18
```

<210> 21
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 21
```
ggccggagcc gcagtgagca cc                                         22
```

<210> 22
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 22
```
cttcgaagct gcagctcccg cag                                        23
```

<210> 23
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 23
```
atggagctgg cggccttgtg ccgct                                      25
```

<210> 24
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 24
```
accggcacag acatgaag                                              18
```

<210> 25
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 25
cactgggtgg gccctggacc ccagca   26

<210> 26
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 26
gatccaagca ccttcacctt cct   23

<210> 27
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 27
gctggctggg gctgcgctc   19

<210> 28
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 28
gggatccaga tgcccttgta gac   23

<210> 29
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 29
tgccccatca actgcaccca   20

<210> 30
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 30
gtggatgtca ggcagatgcc cag   23

<210> 31
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 31
aggaaggtga aggtgcttgg atc   23

<210> 32
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 32
taaggtttgg ccccaaaagt catcag   26

<210> 33
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 33
gtctacaagg gcatctggat ccc   23

<210> 34
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 34
ggctgggggc tgcaggtcag ggg   23

<210> 35
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 35
ctgatgactt ttggggccaa acctta   26

<210> 36
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 36
ttctgcggac ttggccttct gg   22

<210> 37
<211> 23
<212> DNA

<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 37
atcccagccc gggagatccc tga   23

<210> 38
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 38
tggcaggttc ccctgga   17

<210> 39
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 39
cccctgacct gcagcccccca gcc   23

<210> 40
<211> 3768
<212> DNA
<213> Rhesus Monkey

<220>
<221> misc_feature
<222> (1)...(3768)
<223> R = A or G

<221> misc_feature
<222> (1)...(3768)
<223> Y = C or T

<400> 40
atggagctgg cggcctggta ccgctggggg ctcctcctcg ccctcttgcc ccccggagct 60
gcgggcaccc aagtgtgcac cggcacagac atgaagctgc ggctccctgc cagtcccgag 120
acccacctgg acatgctccg ccacctctac cagggctgcc aggtggtgca gggtaacctg 180
gaactcacct acctgcccac caatgccagc ctctccttcc tgcaggatat ccaggaggtg 240
cagggctacg tgctcatcgc tcacaaccaa gtgaggcagg tcccactgca gaggctgcgg 300
attgtgcgag gcacccagct ctttgaggac aactatgccc tggccgtgct agacaatgga 360
gacccgctga acaataccac ccctgtcaca ggggcctccc caggaggcct gcgggagctg 420
cagcttcgaa gcctcacaga gatcttgaaa ggaggggtct tgatccagcg gaacccccag 480
ctctgctacc aggacacgat tttgtggaag gacatcttcc ataagaacaa ccagctggct 540
ctcacactga tcgacaccaa ccgctctcgg gcctgccacc cctgttctcc agtgtgtaag 600
ggctcccgct gctggggaga gagttctgag gattgtcaga gcctgacgcg cactgtctgt 660
gccggtggct gtgcccgctg caaggggcca ctgcccactg actgctgcca tgagcagtgt 720
gctgccggct gcacgggccc caagcactct gactgcctgg cctgcctcca cttcaaccac 780
agcggcatct gtgarctgca ctgcccagcc ctggtcacct acaacacaga caccttgag 840
tccatgccca accccgaggg ccggtataca ttcggcgcca gctgtgtgac tgcctgtccc 900
tacaactacc tttctacgga cgtgggatcc tgcaccctcg tctgccccct gcacaaccaa 960
gaggtgacag cggaggacgg aacacagcga tgtgagaagt gcagcaagcc ctgtgcccga 1020
gtgtgctatg gtctgggcat ggagcacttg cgagaggtga gggcggtcac cagtgccaat 1080
atccaggagt ttgctggctg caagaagatc tttgggagyt tggcatttct gccagagagc 1140

```
tttgatggcg acccagcctc caacaccgcc ccgcttcagc cggagcagct ccgagtgttt 1200
gagactctgg aagagatcac aggttaccta tacatctcag catggccaga cagcctgcct 1260
gaccttagcg tcctccagaa cctgcaagta atccggggac gaattctgca caatggcgcc 1320
tactcactga ccctgcaagg gctgggcatc agctggctgg ggctgcgctc gctgagggaa 1380
ctgggcagtg gactggccct catccaccat aacacccgcc tctgctttgt gcacacggtg 1440
ccctgggacc agctcttccg gaacccgcac caagccctgc tccacactgc caaccggcca 1500
gaggacgagt gtgtgggcga gggcctggcc tgccaccagc tgtgcgcccr agggcactgc 1560
tggggtccag ggcccaccca gtgtgtcaac tgcagccagt tccttcgggg ccaggagtgc 1620
gtggaggaat gccgagtact gcaggggctc cccagggagt atgtgaatgc cagacactgt 1680
ttgccgtgcc accctgagtg tcagccccag aatggctcag tgacatgttt tggaccggag 1740
gctgaccagt gtgtggcctg tgcccactat aaggaccctc ccttctgcgt ggcccgctgc 1800
cccagcggtg tgaaacctga cctctcctac atgcccatct ggaagtttcc agatgaggag 1860
ggcacgtgcc agccttgccc catcaactgc acccactcct gtgtggacct ggatgacaag 1920
ggctgccccg ccgagcagar agccagccct ctgacgtcca tcatctctgc tgtggtgggc 1980
attctgctgg tcgtggtctt ggggggtggtc tttggaatcc tcatcaagcg acggcagcag 2040
aagatccgga agtacacgat gcggaggctg ctgcaggaaa cggagctggt ggagccactg 2100
acaccgagtg gagcgatgcc caaccaggcg cagatgcgga tcctgaaaga gacggagctg 2160
aggaaggtga aggtgcttgg atctggagct tttggacacag tctacaaggg catctggatc 2220
cctgatgggg agaatgtgaa aattccagtg gccatcaaag tgttgaggga aaacacatcc 2280
cccaaagcca acaaagaaat cttagacgaa gcatatgtga tggctggtgt gggctcccca 2340
tatgtctccc gcctcctggg catctgcctg acatccacgg tgcagctggt gacacagctt 2400
atgcccctatg gctgcctctt agaccatgtc cgagaaaacc gcggacgcct gggctcccag 2460
gacctgctga actggtgtat gcagattgcc aagggggatga gctacctgga ggatgtgcgg 2520
ctcgtacaca gggacttggc tgctcggaac gtgctggtca agagtcccaa ccatgtcaaa 2580
attacagact ttgggctggc tcggctgctg gacattgacg agacagagta ccatgcagat 2640
gggggcaagg tgcccatcaa gtggatggcg ctggagtcca ttctccgacg gcggttcacc 2700
caccagagtg atgtgtggag ttatggtgtg actgtgtggg agctgatgac ttttgggggcc 2760
aaaccttacg atgggatccg agcccgggag atccctgacc tgctggaaaa ggggggagcgg 2820
ctgcccccagc cccccatctg caccattgat gtctacatga tcatggtcaa atgttggatg 2880
attgactctg aatgtcggcc gagattccgg gagttggtgt cggaattctc ccgcatggcc 2940
agggaccccc agcgctttgt ggtcatccag aatgaggact tgggcccagc cagtcccttg 3000
gacagcacct tctaccgctc actgctggag gacgatgaca tggggggacct ggtggatgct 3060
gaggagtatc tggtaccccca gcagggcttc ttctgtccag accctgcccc gggcactggg 3120
ggcatggtcc accacaggca ccgcagctca tctaccagga gtggcggtgg ggacctgacg 3180
ctagggctgg agccctctga agaggaggcc cccaggtctc cacrggcacc ctccgaaggg 3240
actggctctg atgtatttga tggtgaccta ggaatggggg cagccaaggg gctgcaaagc 3300
ctccccgcac atgaccccag ccctctacag cggtacagtg aggacccccac ggtacccctg 3360
ccttctgaga ctgacggcta cgttgccccc ctgacctgca gycccccagcc cgaatatgtg 3420
aaccagccag atgttcggcc acagcccccct tcgccccaag agggccctct gtctcctgcc 3480
cgacctactg gtgccactct ggaaaggccc aagactctct ccccagggaa gaatgggggtt 3540
gtcaaagacg tttttgcctt tggggggtgct gtggagaacc ccgagtactt ggcaccccgg 3600
ggaggagctg cccctcagcc ccaccttcct cctgccttca gcccagcctt cgacaacctc 3660
tattactggg accaggaccc atcagagcgg ggggctccac ctagcacctt caaagggaca 3720
cctacggcag agaacccaga gtacctgggt ctggacgtgc cagtgtga           3768
```

<210> 41
<211> 1255
<212> PRT
<213> Rhesus Monkey

<220>
<221> VARIANT
<222> 517
<223> Xaa = Q or R

<221> VARIANT
<222> 647
<223> Xaa = K or R

<221> VARIANT
<222> 1075
<223> Xaa = Q or R

<400> 41

```
Met Glu Leu Ala Ala Trp Tyr Arg Trp Gly Leu Leu Leu Ala Leu Leu
1                   5                   10                  15
Pro Pro Gly Ala Ala Gly Thr Gln Val Cys Thr Gly Thr Asp Met Lys
            20                  25                  30
Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
        35                  40                  45
Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
    50                  55                  60
Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
65                  70                  75                  80
Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
                85                  90                  95
Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
        100                 105                 110
Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
        115                 120                 125
Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
    130                 135                 140
Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
145                 150                 155                 160
Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
                165                 170                 175
Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
            180                 185                 190
His Pro Cys Ser Pro Val Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
        195                 200                 205
Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
    210                 215                 220
Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
225                 230                 235                 240
Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
                245                 250                 255
His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
        260                 265                 270
Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
        275                 280                 285
Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
    290                 295                 300
Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
305                 310                 315                 320
Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
                325                 330                 335
Pro Cys Ala Arg Val Cys Tyr Gly Leu Gly Met Glu His Leu Arg Glu
            340                 345                 350
Val Arg Ala Val Thr Ser Ala Asn Ile Gln Glu Phe Ala Gly Cys Lys
        355                 360                 365
Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu Ser Phe Asp Gly Asp
    370                 375                 380
Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Arg Val Phe
385                 390                 395                 400
Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro
            405                 410                 415
Asp Ser Leu Pro Asp Leu Ser Val Leu Gln Asn Leu Gln Val Ile Arg
        420                 425                 430
Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu
        435                 440                 445
Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly
    450                 455                 460
Leu Ala Leu Ile His His Asn Thr Arg Leu Cys Phe Val His Thr Val
465                 470                 475                 480
Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr
                485                 490                 495
Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His
            500                 505                 510
```

```
Gln Leu Cys Ala Xaa Gly His Cys Trp Gly Pro Gly Pro Thr Gln Cys
        515             520                 525
Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys Val Glu Glu Cys
    530             535                 540
Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr Val Asn Ala Arg His Cys
545             550                 555                 560
Leu Pro Cys His Pro Glu Cys Gln Pro Gln Asn Gly Ser Val Thr Cys
            565                 570                 575
Phe Gly Pro Glu Ala Asp Gln Cys Val Ala Cys Ala His Tyr Lys Asp
        580             585                 590
Pro Pro Phe Cys Val Ala Arg Cys Pro Ser Gly Val Lys Pro Asp Leu
        595             600                 605
Ser Tyr Met Pro Ile Trp Lys Phe Pro Asp Glu Glu Gly Thr Cys Gln
610                 615                 620
Pro Cys Pro Ile Asn Cys Thr His Ser Cys Val Asp Leu Asp Asp Lys
625             630                 635                 640
Gly Cys Pro Ala Glu Gln Xaa Ala Ser Pro Leu Thr Ser Ile Ile Ser
            645                     650                 655
Ala Val Val Gly Ile Leu Leu Val Val Val Leu Gly Val Val Phe Gly
        660                 665                 670
Ile Leu Ile Lys Arg Arg Gln Gln Lys Ile Arg Lys Tyr Thr Met Arg
        675                 680                 685
Arg Leu Leu Gln Glu Thr Glu Leu Val Glu Pro Leu Thr Pro Ser Gly
    690                 695                 700
Ala Met Pro Asn Gln Ala Gln Met Arg Ile Leu Lys Glu Thr Glu Leu
705                 710                 715                 720
Arg Lys Val Lys Val Leu Gly Ser Gly Ala Phe Gly Thr Val Tyr Lys
                725                 730                 735
Gly Ile Trp Ile Pro Asp Gly Glu Asn Val Lys Ile Pro Val Ala Ile
            740                 745                 750
Lys Val Leu Arg Glu Asn Thr Ser Pro Lys Ala Asn Lys Glu Ile Leu
        755                 760                 765
Asp Glu Ala Tyr Val Met Ala Gly Val Gly Ser Pro Tyr Val Ser Arg
    770                 775                 780
Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Val Thr Gln Leu
785                 790                 795                 800
Met Pro Tyr Gly Cys Leu Leu Asp His Val Arg Glu Asn Arg Gly Arg
                805                 810                 815
Leu Gly Ser Gln Asp Leu Leu Asn Trp Cys Met Gln Ile Ala Lys Gly
            820                 825                 830
Met Ser Tyr Leu Glu Asp Val Arg Leu Val His Arg Asp Leu Ala Ala
        835                 840                 845
Arg Asn Val Leu Val Lys Ser Pro Asn His Val Lys Ile Thr Asp Phe
    850                 855                 860
Gly Leu Ala Arg Leu Leu Asp Ile Asp Glu Thr Glu Tyr His Ala Asp
865                 870                 875                 880
Gly Gly Lys Val Pro Ile Lys Trp Met Ala Leu Glu Ser Ile Leu Arg
                885                 890                 895
Arg Arg Phe Thr His Gln Ser Asp Val Trp Ser Tyr Gly Val Thr Val
        900                 905                 910
Trp Glu Leu Met Thr Phe Gly Ala Lys Pro Tyr Asp Gly Ile Pro Ala
    915                 920                 925
Arg Glu Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Pro Gln Pro
    930                 935                 940
Pro Ile Cys Thr Ile Asp Val Tyr Met Ile Met Val Lys Cys Trp Met
945                 950                 955                 960
Ile Asp Ser Glu Cys Arg Pro Arg Phe Arg Glu Leu Val Ser Glu Phe
            965                 970                 975
Ser Arg Met Ala Arg Asp Pro Gln Arg Phe Val Val Ile Gln Asn Glu
        980                 985                 990
Asp Leu Gly Pro Ala Ser Pro Leu Asp Ser Thr Phe Tyr Arg Ser Leu
        995                 1000                1005
Leu Glu Asp Asp Asp Met Gly Asp Leu Val Asp Ala Glu Glu Tyr Leu
    1010                1015                1020
```

```
Val Pro Gln Gln Gly Phe Phe Cys Pro Asp Pro Ala Pro Gly Thr Gly
1025                1030                1035            Ala     1040
Gly Met Val His His Arg His Arg Ser Ser Ser Thr Arg Ser Gly Gly
               1045                1050                1055
Gly Asp Leu Thr Leu Gly Leu Glu Pro Ser Glu Glu Glu Ala Pro Arg
           1060                1065                1070
Ser Pro Xaa Ala Pro Ser Glu Gly Thr Gly Ser Asp Val Phe Asp Gly
           1075                1080                1085
Asp Leu Gly Met Gly Ala Ala Lys Gly Leu Gln Ser Leu Pro Ala His
       1090                1095                1100
Asp Pro Ser Pro Leu Gln Arg Tyr Ser Glu Asp Pro Thr Val Pro Leu
1105                1110                1115                1120
Pro Ser Glu Thr Asp Gly Tyr Val Ala Pro Leu Thr Cys Ser Pro Gln
               1125                1130                1135
Pro Glu Tyr Val Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro
               1140                1145                1150
Gln Glu Gly Pro Leu Ser Pro Ala Arg Pro Thr Gly Ala Thr Leu Glu
           1155                1160                1165
Arg Pro Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val
       1170                1175                1180
Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Ala Pro Arg
1185                1190                1195                1200
Gly Gly Ala Ala Pro Gln Pro His Leu Pro Pro Ala Phe Ser Pro Ala
               1205                1210                1215
Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Ser Glu Arg Gly Ala
               1220                1225                1230
Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr
       1235                1240                1245
Leu Gly Leu Asp Val Pro Val
       1250                1255
```

<210> 42
<211> 3768
<212> DNA
<213> Rhesus Monkey

<400> 42
```
atggagctgg cggcctggta ccgctggggg ctcctcctcg ccctcttgcc ccccggagct 60
gcgggcaccc aagtgtgcac cggcacagac atgaagctgc ggctccctgc cagtcccgag 120
acccacctgg acatgctccg ccacctctac cagggctgcc aggtggtgca gggtaacctg 180
gaactcacct acctgcccac caatgccagc ctctccttcc tgcaggatat ccaggaggtg 240
cagggctacg tgctcatcgc tcacaaccaa gtgaggcagg tcccactgca gaggctgcgg 300
attgtgcgag gcacccagct ctttgaggac aactatgccc tggccgtgct agacaatgga 360
gacctgctga caataccac ccctgtcaca ggggcctccc aggaggcct gcgggagctg 420
cagcttcgaa gcctcacaga gatcttgaaa ggaggggtct tgatccagcg gaaccccag 480
ctctgctacc aggacacgat tttgtggaag gacatcttcc ataagaacaa ccagctggct 540
ctcacactga tcgacaccaa ccgctctcgg gcctgccacc cctgttctcc agtgtgtaag 600
ggctcccgct gctggggaga gagttctgag gattgtcaga gcctgacgcg cactgtctgt 660
gccggtggct gtgcccgctg caaggggcca ctgcccactg actgctgcca tgagcagtgt 720
gctgccggct gcacgggccc caagcactct gactgcctgg cctgcctcca cttcaaccac 780
agcggcatct gtgaactgca ctgcccagc ctggtcgcca gctgtgtgac tgcctgtccc 840
tccatgccca accccgaggg ccggtataca ttcggcgcca gctgtgtgac tgcctgtccc 900
tacaactacc tttctacgga cgtgggatcc tgcaccctcg tctgcccct gcacaaccaa 960
gaggtgacag cggaggacgg aacacagcga tgtgagaagt gcagcaagcc ctgtgcccga 1020
gtgtgctatg tctctgggcat ggagcacttg cgagaggtga gggcggtcac cagtgccaat 1080
atccaggagt ttgctggctg caagaagatc tttgggagct ggcatttct ccagagagc 1140
tttgatggcg acccagcctc caacaccgcc cgcttcagc cggagcagct ccgagtgttt 1200
gagactctgg aagagatcac aggttaccta tacatctcag catggccaga cagcctgcct 1260
gaccttagcg tcctccagaa cctgcaagta atccggggac gaattctgca caatggcgcc 1320
tactcactga ccctgcaagg gctgggcatc agctggctgg ggctgcgctc gctgagggaa 1380
ctgggcagtg gactggccct catccaccat aacacccgcc tctgctttgt gcacacggtg 1440
ccctgggacc agctcttccg gaacccgcac caagccctgc tccacactgc caaccggcca 1500
gaggacgagt gtgtgggcga gggcctggcc tgccaccagc tgtgcgcccg agggcactgc 1560
```

```
tggggtccag ggcccaccca gtgtgtcaac tgcagccagt tccttcgggg ccaggagtgc 1620
gtggaggaat gccgagtact gcaggggctc cccagggagt atgtgaatgc cagacactgt 1680
ttgccgtgcc accctgagtg tcagccccag aatggctcag tgacatgttt tggaccggag 1740
gctgaccagt gtgtggcctg tgcccactat aaggaccctc ccttctgcgt ggcccgctgc 1800
cccagcggtg tgaaacctga cctctcctac atgcccatct ggaagtttcc agatgaggag 1860
ggcacgtgcc agtcttgccc catcaactgc acccactcct gtgtggacct ggatgacaag 1920
ggctgccccg ccgagcagag agccagccct ctgacgtcca tcatctctgc tgtggtgggc 1980
attctgctgg tcgtggtctt gggggtggtc tttggaatcc tcatcaagcg acggcagcag 2040
aagatccgga agtacacgat gcggaggctg ctgcaggaaa cggagctggt ggagccactg 2100
acaccgagtg gagcgatgcc caaccaggcg cagatgcgga tcctgaaaga gacggagctg 2160
aggaaggtga aggtgcttgg atctggagct tttggcacag tctacaaggg catctggatc 2220
cctgatgggg agaatgtgaa aattccagtg gccatcaaag tgttgaggga aaacacatcc 2280
cccaaagcca acaaagaaat cttagacgaa gcatatgtga tggctggtgt gggctcccca 2340
tatgtctccc gcctcctggg catctgcctg acatccacgg tgcagctggt gacacagctt 2400
atgcccctatg gctgcctctt agaccatgtc cgagaaaacc gcggacgcct gggctcccag 2460
gacctgctga actggtgtat gcagattgcc aagggggatga gctacctgga ggatgtgcgg 2520
ctcgtacaca gggacttggc tgctcggaac gtgctggtca agagtcccaa ccatgtcaaa 2580
attacagact ttgggctggc tcggctgctg gacattgacg agacagagta ccatgcagat 2640
gggggcaagg tgcccatcaa gtggatggcg ctggagtcca ttctccgacg gcggttcacc 2700
caccagagtg atgtgtggag ttatggtgtg actgtgtggg agctgatgac ttttgggggcc 2760
aaaccttacg atgggatccc agcccgggag atccctgacc tgctggaaaa ggggggagcgg 2820
ctgccccagc cccccatctg caccattgat gtctacatga tcatggtcaa atgttggatg 2880
attgactctg aatgtcggcc gagattccgg gagttggtgt cggaattctc ccgcatggcc 2940
agggaccccc agcgcttttgt ggtcatccag aatgaggact tgggcccagc cagtcccttg 3000
gacagcacct tctaccgctc actgctggag gacgatgaca tgggggacct ggtggatgct 3060
gaggagtatc tggtacccca gcagggcttc ttctgtccag accctgcccc gggcactggg 3120
ggcatggtcc accacaggca ccgcagctca tctaccagga gtggcggtgg ggacctgacg 3180
ctagggctgg agccctctga agaggaggcc cccaggtctc cacgggcacc ctccgaaggg 3240
actggctctg atgtatttga tggtgaccta ggaatggggg cagccaaggg gctgcaaagc 3300
ctccccgcac atgacccccag ccctctacag cggtacagtg aggaccccac ggtacccctg 3360
ccttctgaga ctgacggcta cgttgcccc ctgacctgca gtccccagcc cgaatatgtg 3420
aaccagccaga atgttcggcc acagccccct tcgccccaag agggccctct gtctcctgcc 3480
cgacctactg gtgccactct ggaaaaggccc aagactctct ccccagggaa gaatggggtt 3540
gtcaaagacg ttttttgcctt tggggggtgct gtggagaacc ccgagtactt ggcaccccgg 3600
ggaggagctg cccctcagcc ccaccttcct cctgccttca gcccagcctt cgacaacctc 3660
tattactggg accaggaccc atcagagcgg ggggctccac ctagcacctt caaagggaca 3720
cctacggcag agaacccaga gtacctgggt ctggacgtgc cagtgtga    .        3768
```

<210> 43
<211> 3768
<212> DNA
<213> Rhesus Monkey

<400> 43
```
atggagctgg cggcctggta ccgctggggg ctcctcctcg ccctcttgcc ccccggagct 60
gcgggcaccc aagtgtgcac cggcacagac atgaagctgc ggctccctgc cagtcccgag 120
acccacctgg acatgctccg ccacctctac cagggctgcc aggtggtgca gggtaacctg 180
gaactcacct acctgcccac caatgccagc ctctccttcc tgcaggatat ccaggaggtg 240
cagggctacg tgctcatcgc tcacaaccaa gtgaggcagg tcccactgca gaggctgcgg 300
attgtgcgag gcacccagct ctttgaggac aactatgccc tggccgtgct agacaatgga 360
gacctgctga caataccac ccctgtcaca ggggcctccc caggaggcct gcgggagctg 420
cagcttcgaa gcctcacaga gatcttgaca gagggtgtct tgatccagcg gaacccccag 480
ctctgctacc aggacacgat tttgtggaag gacatcttc ataagaacaa ccagctggct 540
ctcacactga tcgacaccaa ccgctctcgg gcctgccacc ctgttctcc agtgtgtaag 600
ggctcccgct gctggggaga gagttctgag gattgtcaga gcctgacgcg cactgtctgt 660
gccggtggct gtgcccgctg caaggggcca ctgcccactg actgctgcca tgagcagtgt 720
gctgccggct gcacgggccc caagcactct gactgcctgg cctgcctcca cttcaaccac 780
agcggcatct gtgagctgca ctgcccagcc ctggtcacct acaacacaga cacctttgag 840
tccatgccca accccgaggg ccggtataca ttcggcgcca gctgtgtgac tgcctgtccc 900
tacaactacc tttctacgga cgtgggatcc tgcaccctcg tctgcccct gcacaaccaa 960
gaggtgacag cggaggacgg aacacagcga tgtgagaagt gcagcaagcc ctgtgcccga 1020
gtgtgctatg gtctgggcat ggagcacttg cgagaggtga gggcggtcac cagtgccaat 1080
atccaggagt ttgctggctg caagaagatc tttgggagct ggcatttct gccagagagc 1140
tttgatggcg acccagcctc caacaccgcc ccgcttcagc cggagcagct ccgagtgttt 1200
```

```
gagactctgg aagagatcac aggttaccta tacatctcag catggccaga cagcctgcct 1260
gaccttagcg tcctccagaa cctgcaagta atccggggac gaattctgca caatggcgcc 1320
tactcactga ccctgcaagg gctgggcatc agctggctgg ggctgcgctc gctgagggaa 1380
ctgggcagtg gactggccct catccaccat aacacccgcc tctgctttgt gcacacggtg 1440
ccctgggacc agctcttccg gaacccgcac caagccctgc tccacactgc caaccggcca 1500
gaggacgagt gtgtgggcga gggcctggcc tgccaccagc tgtgcgcccg agggcactgc 1560
tggggtccag ggcccaccca gtgtgtcaac tgcagccagt ccttcggggg ccaggagtgc 1620
gtggaggaat gccgagtact gcaggggctc cccagggagt atgtgaatgc cagacactgt 1680
ttgccgtgcc accctgagtg tcagccccag aatggctcag tgacatgttt tggaccggag 1740
gctgaccagt gtgtggcctg tgcccactat aaggaccctc ccttctgcgt ggcccgctgc 1800
cccagcggtg tgaaacctga cctctcctac atgcccatct ggaagtttcc agatgaggag 1860
ggcacgtgcc agtcttgccc catcaactgc acccactcct gtgtggacct ggatgacaag 1920
ggctgccccg ccgagcagag agccagccct ctgacgtcca tcatctctgc tgtggtgggc 1980
attctgctgg tcgtggtctt gggggtggtc tttggaatcc tcatcaagcg acggcagcag 2040
aagatccgga agtacacgat gcggaggctg ctgcaggaaa cggagctggt ggagccactg 2100
acaccgagtg gagcgatgcc caaccaggcg cagatgcgga tcctgaaaga gacggagctg 2160
aggaaggtga aggtgcttgg atctggagct tttggcacag tctacaaggg catctggatc 2220
cctgatgggg agaatgtgaa aattccagtg gccatcaaag tgttgaggga aaacacatcc 2280
cccaaagcca acaaagaaat cttagacgaa gcatatgtga tggctggtgt gggctcccca 2340
tatgtctccc gcctcctggg catctgcctg acatccacgg tgcagctggt gacacagctt 2400
atgccctatg gctgcctctt agaccatgtc cgagaaaacc gcggacgcct gggctcccag 2460
gacctgctga actggtgtat gcagattgcc aagggggatga gctacctgga ggatgtgcgg 2520
ctcgtacaca gggacttggc tgctcggaac gtgctggtca agagtcccaa ccatgtcaaa 2580
attacagact ttgggctggc tcggctgctg gacattgacg agacagagta ccatgcagat 2640
gggggcaagg tgcccatcaa gtggatggcg ctggagtcca ttctccgacg gcggttcacc 2700
caccagagtg atgtgtggag ttatggtgtg actgtgtggg agctgatgac ttttggggcc 2760
aaaccttacg atgggatccc agcccgggag atccctgacc tgctggaaaa gggggagcgg 2820
ctgccccagc cccccatctg caccattgat gtctacatga tcatggtcaa atgttggatg 2880
attgactctg aatgtcggcc gagattccgg gagttggtgt cggaattctc ccgcatggcc 2940
agggaccccc agcgctttgt ggtcatccag aatgaggact tgggcccagc cagtccttg 3000
gacagcacct tctaccgctc actgctggag gacgatgaca tggggacct ggtggatgct 3060
gaggagtatc tggtaccccca gcagggcttc ttctgtccag accctgcccc gggcactggg 3120
ggcatggtcc accacaggca ccgcagctca tctaccagga gtggcggtgg ggacctgacg 3180
ctagggctgg agccctctga agaggaggcc cccaggtctc cacgggcacc ctccgaaggg 3240
actggctctg atgtatttga tggtgaccta ggaatggggg cagccaaggg gctgcaaagc 3300
ctccccgcac atgacccag ccctctacag cggtacagtg aggaccccac ggtaccctg 3360
ccttctgaga ctgacggcta cgttgccccc ctgacctgca gtccccagcc cgaatatgtg 3420
aaccagccag atgttcggcc acagcccct tcgcccaag agggccctct gtctcctgcc 3480
cgacctactg gtgccactct ggaaaggccc aagactctct ccccagggaa gaatggggtt 3540
gtcaaagacg tttttgcctt tggggggtgct gtggagaacc ccgagtactt ggcaccccgg 3600
ggaggagctg ccccctcagcc ccaccttcct cctgccttca gcccagcctt cgacaacctc 3660 ,
tattactggg accaggaccc atcagagcgg ggggctccac ctagcacctt caaagggaca 3720
cctacggcag agaacccaga gtacctgggt ctggacgtgc cagtgtga           3768
```